

USER & ASSEMBLY INSTRUCTIONS



tow line attachment for outboard RIBs and runabouts

	power range*	maximum tow load
TurboSwing® XM	30 - 60 HP	400 lbs
TurboSwing® XL	50 - 150 HP	600 lbs
TurboSwing® XXL	100 - 250 HP	500 lbs
TurboSwing® GIANT	100 - 250 HP	500 lbs
TurboSwing® XXL-Twin	100 - 250 HP	500 lbs
TurboSwing® GIANT-Twin	100 - 250 HP	500 lbs

* depends on outboard HP and coil dimensions



- 1 TurboSwing® circular tow bar
- 2 mounting clamps, left and right, with pivoting function.
- TurboSwing®-XM and -XL: 2 stabilising 8mm (5/16") bolts, each with 2 washers, and 2 black plastic sleeves to downsize the mounting clamp holes from 12mm (1/2") to 8mm (5/16")
- TurboSwing® XXL: 2 stabilising 12mm (1/2") bolts with washers
- EZpulley™ with spring hook for easy rope fastening and release
- protective strip for motor shaft protection when fully tilting
- 2 stoppers for EZpulley™, to be placed 1 on each side near transom to keep EZpulley™ from fully rolling towards the transom
- 2 karabiners / quick securing and 2 8mm bolts with self locking nut for Permanent locking / securing the TurboSwing tow bar
- all made from marine316™ corrosion resistant stainless steel.

TurboSwing®
mounting impression:
with 2 mounting clamps
on outboard motor bracket

The EZpulley™ travels freely
around the engine head,
and around the corners,
back toward transom when
the ski rope is retrieved.

See also step 9

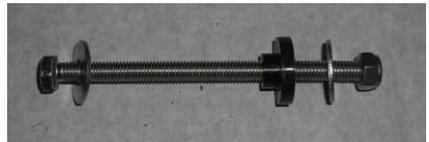


Step 1:

INSTALL both TurboSwing®-MOUNTING CLAMPS each with 2 bolts:
Place one mounting clamp at the time! No need to dismount!

**Outboards having 2 bolts left AND right
each side of the upper motor bracket:**

Remove the nuts and washers; place the
mounting clamp over the bolts, with the
bracket and clamp upper bolt holes matching
each other. Place back the washers and nuts,
and tighten to torque.



8mm (5/8") stabilising bolt

**Outboards having just 1 bolt left AND right
each side of the upper motor bracket:**

place a second, stabilising bolt, leaving 1 to 3
holes in between original bolt and stabilising bolt.

TurboSwing® XM and XL: 8mm stabilising bolt

Insert the black sleeve into the motor bracket hole
and use it to centre, while drilling the 8mm (5/16")
hole. Place the stabilising bolt from transom inside:
washer first, through transom, downsizing sleeve
into mounting clamp, washer, place nut, tighten.

TurboSwing® XXL: 12mm stabilising bolt

Drill a 12mm/1/2" hole and place 12mm/1/2" bolt
from transom inside: big washer first,
through transom, small washer, place nut, tighten.



Repeat the same procedure for the other mounting clamp.

Use a marine waterproofing sealer in the holes and around the bolts to make the installation water tight.

Step 2: tighten bolt nuts: 2 each side

Original bracket bolt nuts to be tightened to original torque as recommended by the outboard motor manufacturer;
stabilising bolts to be tightened firmly.

Step 3:

PLACE the TurboSwing® into the holding clamps.

Place the TURBOSWING ski bar from the top down. Trimming up the outboard somewhat makes placement easier.

Step 4:

SECURE the TurboSwing® on both sides with 2 karabiners, one each side, for quick removal of the tow bar,

Always use undamaged karabiners!

OR:

2 bolts with self locking nuts, one each side for permanent securing (preferred)

You can protect the TurboSwing® against theft by using a marine grade padlock or bolts with self-tightening nut (supplied with the kit)



Step 5:

TUNING the AutoTrim pivoting mechanism

Function:

Allows TurboSwing to fully tilt while trimming up the outboard engine

Between the bolted part of the mounting clamps and the pivoting part, there is a friction disc.

The setting of the friction should be such that the TurboSwing® tow bar always swings down under its own weight to the lower position.



Step 6:

SETTING the "Pre-Trim" angle of the TurboSwing® tow bar:

Function:

To maintain a predetermined level or angle of inclination of the TurboSwing® ski bar in planing mode.

The pre-trim determines the height of the ski rope above the water level.



Before setting the pre-trim" angle, trim the outboard motor fully down into its lowest position.



Assuming for instance a planing angle of 10 degrees, you may give the TurboSwing a "pre-trim" of 20-30 degrees, resulting in a 10-20 degree upward position in planing mode.

Setting the pre-trim angle of inclination:

- 1.** make sure that the pre-trim bolts in the circular sleeves are untightened so that the TurboSwing®-tow bar will swing down. The bolts are locking themselves in the special locking nuts that can slide through the sleeves when untightened. They can easily be tightened with one tool.
- 2.** fully trim down the outboard.
- 3.** bring the **TurboSwing® to bar in the desired pre-trim angle** and make sure that the EZroller has sufficient room to roll around the coil; a minimum of ½" or 1 cm is recommended.
- 4. fully slide the pre-trim-locking bolt towards the transom, against the stop of the inner mounting plate; firmly tighten the pre-trim locking bolt**



Firmly tighten the angle setting locking bolt.

1.5cm / ½"

Step 7: Bond rubber protective strip.

FUNCTION:

protection of shaft tail-end the TURBOSWING-bracket when fully trimming / tilting up outboard

The surface should be dry and free of any contamination. Use a waterproof glue such as Loctite® and press firmly into place.

IMPORTANT:

Make sure that the strip follows the chafing track of the TurboSwing®. The location varies depending on the size of TurboSwing chosen and the length of your shaft.



Step 8: Check the AutoTrim function

Function:

To automatically trim up the TurboSwing ski bar to the highest position without impeding **full and uninterrupted trim of the outboard**.

Once you have set the pre-trim and have applied the protective strip, you can check the AutoTrim function.

Carefully and fully trim up the outboard to make sure that it can freely make the full swing up, while lifting the TurboSwing.

Make sure that the TurboSwing bar touches above the cavitation plate; otherwise you should consider a smaller type TurboSwing.

IMPORTANT: after installation or modification and before use:

- make sure that outboard, in fully trimmed down position can freely turn to left and right, leaving room for the EZpulley to pass freely
- in case the EZroller touches the coil, but the TurboSwing bar does not chafe engine; move the plastic stopper outward far enough, away from transom, to keep roller clear from the coil
- check whether you can freely and fully trim up the engine

IN CASE OF NON-FITTING or any doubt: contact TurboSwing



8. IMPORTANT NOTICE:

Always make sure your anodes are in good condition in order to prevent galvanic corrosion. They may sacrifice quicker. Check them at regular intervals

On the basis of the mounts there is a hole where you can place an extra anode on each mount using a stainless steel nut and bolt.

Especially when constantly being in the water, especially salt water, extra anodes should be considered.

The shape of the anode does not matter



Step 9: EZpulley™ with spring hook.

FUNCTION:

- tow rope attachment and release
- guiding tow rope around the coil

Simply press the spring clip and insert the line loop into the spring hook.

The EZpulley™ leads the ski rope along the TurboSwing®, and around the outboard. Thanks to the inclined tow bar the EZroller will automatically roll towards the transom once the line falls slack / is pulled in.

When releasing the rope, it will tension, and automatically will be freely pulled away from the stopper around the tow bar corner.

The stoppers are placed near the transom to secure the EZpulley™ when not in use; you may secure the EZroller to a towing ring with an elastic cord .

Your TurboSwing® is proudly made of corrosion resistant marine316™ stainless steel.

We wish you many years of pleasure!



Step 10: MAINTENANCE

On the water surface all kinds of corrosive elements concentrate, such as chlorides and iron oxides. We recommend that you remove any contamination with a plastic brush or sponge (no metal abrasive pads!!) using plain water and soap. For aggressive contamination, such as lime deposit, use a waterline / hull cleaner: after cleaning thoroughly rinse with clean water.



Ready for action? Let the fun begin: Full Swing with TurboSwing!

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TurboSwing[®]
the power behind your outboard